Oil and Gas Industry Air Shed Management Meeting
Tuesday, January 9, 2007
Division of Air Quality, Salt Lake City

(unofficial meeting notes taken by Lisa Bryant, there were some additional handouts, which will be available on DAQ's website soon, I have copies if anyone wishes to have them.)

The first part of the meeting was an overview for newcomers of the history & actions of the group.

Monitoring in the west and modeling from the WRAP (Western Regional Air Partnership) indicated that there are elevated ozone levels in the Uinta Basin, similar to increases that have been noted in other areas of high oil and gas development such as WY and NM. Current AQ Programs have been difficult to implement with existing data and information.

As a result DAQ conducted some preliminary emissions inventory and that led to meetings with local oil and gas industry people and recognition of a need for a better more comprehensive and accurate inventory to reflect conditions in the Uinta Basin.

This group has been formed specifically to address air quality & permitting issues related to energy development in Utah. The focus is on the Uinta Basin right now, since that's where the State has the greatest concerns, but it may expand in the future. Key tasks for the group include: ambient air monitoring, comprehensive emissions inventory, streamline permitting, and developing appropriate emission reduction strategies.

The following includes highlights related to accomplishments of the air group and DAQ staff to date:

1. Colleen Delaney presented information on a new webpage that will be part of DAQ's website. It is expected to be available by the end of the week (1/12/07). This page is specifically focused on air quality and the oil and gas industry. It will include more recent data collected at Dinosaur National Monument (2005/2006), reports and analyses regarding ozone and other contaminants; the 2005 oil and gas emissions inventory for the Uinta Basin, monitoring efforts, etc… (*note: DAQ had some unique findings in the monitoring data in that ozone has very large diurnal fluctuations, more like what would be expected for an urban area, rather than a rural area; data trends are very consistent with data from Canyonlands NP, but generally lower; currently 8hr ozone and PM10 strds are being met – she didn't report on others; and average ozone levels are about 10 ppm higher than in 1983, based on limited baseline data.)*
2. Scott Hanks specifically reviewed the process he worked through in developing an oil and gas emissions inventory for the Uinta Basin. He also compared data to that of the WRAP for the larger western region and found very consistent results,

although not the same, similar in magnitude. The emission inventory is nearly complete and data will be on the website, however there are still a few remaining details to clarify with companies and cleanup for final report.

3. Bob Dalley presented information on monitoring: there are 28 monitoring sites throughout the state, mostly along the Wasatch front in the non-attainment areas. One new one was recently added in St. George and one more was added in Vernal (in town). (*Note that Colleen mentioned the monitoring from Dinosaur NM, which apparently isn't EPA approved equipment for compliance referencing, although correlations with IMPROVE sites in Utah and CO indicate that its good data.)* State DAQ is also looking at adding two more monitoring stations, one within the major area of development and possibly one in a "pristine" or clean area to be used as baseline or comparative data. In the discussion I suggested that they coordinate with the USFS (not present at meeting) – I recently spoke with an air specialist from the Ashley interested in finding partners for an IMPROVE site.
4. A gentleman from WY, indicated that ozone monitoring in the Jonah Field near Pinedale, indicated increased ozone levels and they are also investigating the need and potential locations for increased monitoring.
5. WRAP is focused on <u>modeling</u> regional haze for the Western States. Patrick Barickman tested the model and ways to interpolate data specific to the Uinta Basin. Tests with data from Canyonlands NP and other nearby IMPROVE sites in nearby states show excellent correlation, so DAQ is very hopeful that the models developed by WRAP for regional haze can be used at more local levels to predict emissions. He also reviewed 4 existing modeling efforts and how they might be used by this group. All will be useful in providing data and information for planning and compliance.
    a. WRAP modeling domain 12 km: fine resolution and good correlation with 2002 data; didn't use the latest inventory & can't be used for future emission predictions
    b. WRAP modeling domain 36 km: coarser resolution, utilized latest inventory information, predicts emissions out to 2018, provides a coarse filter for issues related to projected growth
    c. NPS/Colorado State University used a different type of model and ran it with/without O&G emissions; model was limited to the 4 corners region, didn't include Uinta Basin, but was able to identify hot spots based on O&G activities
    d. Four Corners Air Quality Task Force: this group is in the initial stages of developing a model, using 2005 emissions data and including projections to the year 2018. It doesn't include the Uinta Basin, although its close, however, analysis and conclusions will help Utah determine its modeling and monitoring needs.
6. Next Steps:
    a. Utah DAQ needs help from Fed Land Managers, Industry, DOGM to help with a projected development scenario for 2018. Current suggestion is to use the information from WRAP that was used in their 2018 projections and then review and fine tune the assumptions and figures to reflect more accurately the conditions in the Uinta Basin. (*there was some discussion*

about whether this info is available from WRAP yet, but it will be soon if not already). **George pointed out this would be a great opportunity to work together:** (often companies &/or land managers develop these scenarios in their analyses and then the state also makes projections for compliance purposes and usually the answers aren't the same and its an unnecessary duplication of efforts).

b. Next meeting Rick Sprott (meeting coordinator) asked if BLM &/or USFS make presentations regarding analysis needs (and permitting) – the exact nature of the information needed wasn't clearly defined, but there seemed to be consensus from the group that they were interested in hearing BLM's/USFS's thoughts on the outyear projections and our analysis process and requirements (cumulative analysis); permitting too?.
c. Include other players at table: USFS, NPS (invited but couldn't make this meeting).

7. Next meeting not definitively scheduled but likely to be in February at the end of the state legislative session and will be held somewhere in the Uinta Basin, probably Duchesne County.